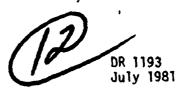


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METEOROLOGICAL DATA REPORT.

19305A MLRS,
Missile Numbers BN-013, BN-009, BN-010,
BN-011, BN-012, V02-007,
Round Numbers V-163/MD-29, V-164/MD-30,
V-165/MD-31, V-166/MD-32, V-167/MD-33, V-168/MD-34
11 July 1981,

by

DONALD C. KELLER Program Support Coordinator Phone Number (505) 679-9568 AVN Number 349-9568

(19) = 14 AM MASI- DK-1110

ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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19305A MLRS Missile Numbers BNO13, BNO09, BNO10, BNO11, BNO12,	
V02-007	6. PERFORMING ORG. REPORT NUMBER
Round Numbers V163/MD29, V164/MD30, V165/MD31,	8. CONTRACT OR GRANT NUMBER(s)
Trooping 1107/11000; 1100/11004	S. CONTRACT ON GRANT NUMBER(S)
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White Sands Meteorological Team 9. PERFORMING ORGANIZATION NAME AND ADDRESS	DA Task 1F665702D127-02
US Army Electronics Research & Development Omd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
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US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory	July 1981
White Sands Missile Range, New Mexico 88002	13. NUMBER OF PAGES 27
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Meteorological data gathered for the launching of BN013, BN009, BN010, BN011, BN012, V02-007, Round 165/MD31, V166/MD32, V167/MD33, V168/MD34 presente	No. V163/MD32, V164/MD30, V-
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INTRODUCTION

19305A MLRS, Missile Numbers BN-013, BN-009, BN-010- BN-011, BN-012, and Vo2-007, Round Numbers V-163/MD-29, V-164/MD-30, V-165/MD-31, V-166/MD-32, V-167/MD-33, and V-168/MD-34, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1200, 1200:05, 1200:10, 1200:14, 1200:19, and 1200:23 MDT, 06 July 1981. The scheduled times were 1200, 1200:04.5, 1200:09, 1200:13.5, 1200:18 and 1200:22.5 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained in the following methods:

Observations:

a. Surface

- (1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m^3) , wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.
- (2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air:

(1) Low level wind data were obtained from Single Theodolite pibal observations at:

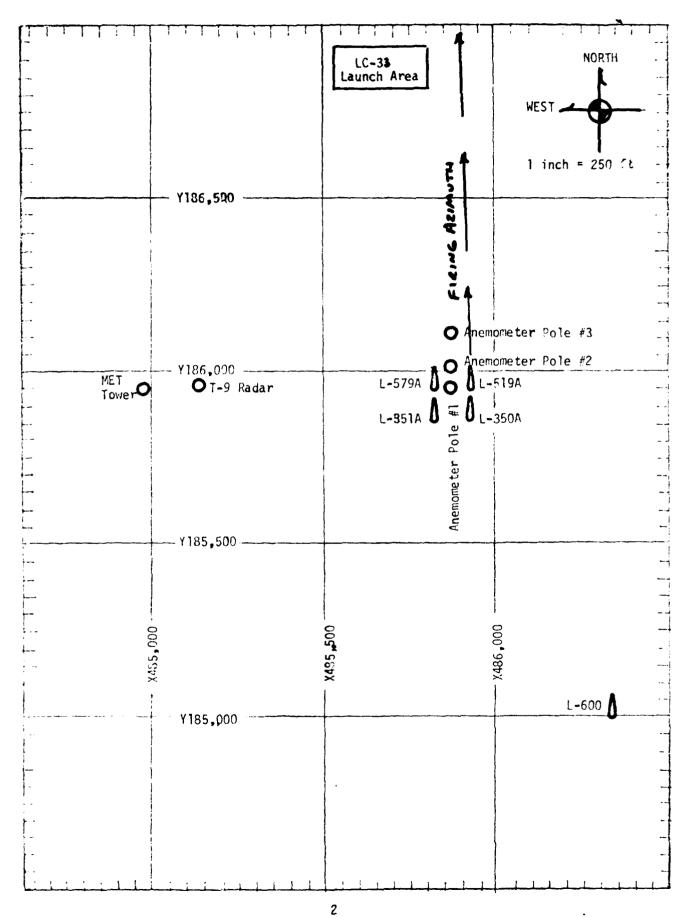
SITE AND ALTITUDE

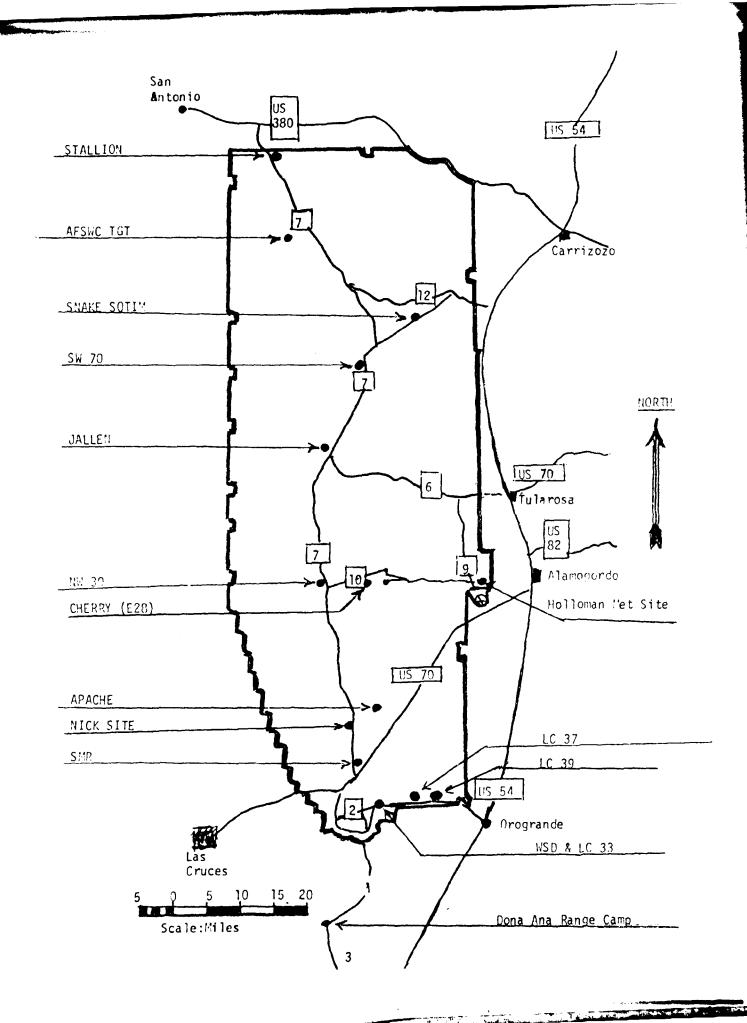
LC-33 2 KM NICK 2 KM

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

WSD 0900 MDT LC-37 1000 MDT WSD 1100 MDT LC-37 1200 MDT





PPOJECT SURFACE OBSERVATION

	H=3983	DIRECTION SPEED CHARACTER VISIBIL- degs Tn kts kts	\$0¢	
	85,957,73	CHARACT kts		
-33	54 Y=18	VIND SPEED kts	05	
STATION LC-33	X= 484,982.64 Y=185,957,73 H=3983	DIRECTION degs Tn	165	
		DENSIIY U	866	
		PELATIVE HUMIDITY %	32	
		i I	13.0	
		DEM POINT OF OC		
	1	PATURE OC	32.0	
	VE/88	361:31 36:		
	MUNIT VEYR	PRESSURE TEMPERATURE mbs of oc	881.4	
TABLE 1	DATE 11	TINE M.D.J.	1200	

					CLOUDS					
DESTRUCTIONS	15	t LAYE		2n	d LAYE	2nd LAYER	1 3r	d LAYE	ď	REMARKS
TO VISIBÍLITY AMT TYPE HGT	AMT	TYPE		AMT	TYPE	нст	AMT	AMT TYPE HGT	нст	
	က	Ω	0059				0	CI	0 CI 25,000	

PUTATION		0	2	80	0	
PSYCHROPETRIC CC:PUTATION	TIME: MDT 1200	DRY BULB TELP. 32,0	WET DULB TETP. 19.2	WET BULD OFPR. 12.8	DEW POINT 13.0	DELATIVE WINTED

POLE #1 X485,87 Y185,95 H4018.7 38.7 ft	8,90 4		POLE # %485,87 Y186,01; H4033.5 53.0 ft	4.9 3 2.00 7		7485,87 (186,11 (4063.9 (33.6 ft	7.29 6.06 2	
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	orer eng	I-TIME L.C	DIP DEG	(ATE)
I-30	158	04	T-30	176	04	T-30	162	04
T-20	159	03	T-20	172	03	T-21	183	04
T ₋₁₀	141	02	T-10	201	01	T_?	174	04
0.CT	128	02	T0.0	209	01	T <u> </u>	181	04
<u>I+10</u>	120	02	T+10	C A	L M		193	04

TABLE 3 LC-33 METEOROLOGICAL TOWER AND MOMETER MEASURED WIND (OR ET TOWER)

LEVEL #1, 1 X484,982.64		73, H3983.00 (Fase)	LEVEL #2, 6 X484.082.64		3, 83983. / (base)
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	012 013	(SPLEO YES
T -30	141	04	T-30	158	04
T ₋₂₀	143	04	T ₋₂₀	164	02
T-10	152	03	T-10	155	04
то.0	143	03	T0.0	139	04
T+10	123	04	T+10	147	05

LEVEL #3, 10 X484,982.64)2 FEET Y185,057.7	3, H3983.00 (base)	LEVEL #4, 20 X484,982, 71		3903.00 (base)
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED FIS
T-30	150	04	T- 30	134	06
T-20	158	05	T- 20	137	07
T-10	148	06	T-10	143	08
т0.0	146	07	T0.0	132	06
1+10	142	06	T+10	134	07

T-TIME PILOT-BALLOOM MEASURED WITH DV 12

DATE 11 July 1981

SITE: LC-33 TIME: 1200 MDT SITE: NICK
TIME: 1200 MDT

WSTM COORDINATES:

WSTM COOPDINATES:

Y= 485,135.76 Y= 185,919.24 X= 470,734.56 Y= 255,734.64

H= 3,988.57

H= 4,126.57

LAYER MICPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MICROINT	DIPECTION DECOME	05511 <u>81</u> 07
SUBFACE	165	05	Sincret	203	06
150	189	80	157	184	06
210	190	09	310	180	06
370	187	09	272	179	06
331	184	09	337	177	06
390	183	09	300	179	06
500	184	09	500	185	06
660	184	80	657	184	06
8 M	177	06	800	182	07
95.1	157	05	950	180	08
1157	150	05	1150	177	80
1350	173	05	1350	171	07
1555	179	05	1550	162	06
1750	159	07	1750	158	06
500.	170	07	2000	148	06

All data obtained from Single Theodolite Pilot-Balloon Tracked Observations.

AIMING AND T-Time COMPUTER MET MESSAGES

WSD 0900 MDT	LC-37 1000 MDT	WSD 1100 MDT
METCM1324064	METCM1324063	1,00 1.81
111500122883		METCM1324064
	111600124881	111700122882
00373004 29980883	00364007 30360881	00320005 30440882
01300006 29890873	01348011 30100871	01326009 30310872
02306007 29640848	02312005 29750846	
03307010 29380810		
		03317011 29630810
20100701	04323011 29140762	04351009 29230764
05348005 28840720	05374005 28810719	05355006 28860721
06294005 28450679	06306005 28390677	06274005 28470679
07307006 28050639	07292006 28020637	
08283005 27740601		07306003 28130640
	08291005 27690600	08339005 27790602
09309008 27440565	09315005 27410564	09310008 27440566
10305008 27090531	10338005 27040530	10327006 27060531
11252 01 0 26800498	11273009 26720497	
12246011 26390453		11290012 26790499
12240011 20390433	12240011 26300451	12248012 26340453

0E00eTIC COOKUJIMATES 32.40043 LAT DEG 106.37033 LUM UEG																			
A12a	K-L.HUM. PEHCENT	9.8 7	0.10	0.90	0.60	₽8•B	51.0	0.7.0	/2.0	01.0	73.0	56.0	38.0	<1.0	0.0>	0.07	45.0	18.0	0.51
SIGNIFICANT LEVEL JAIA 1920ANN947 LHITE SANDS	TEMPLRATALE AIR DEWAATH DEGKELS CENTIOKADE	3,5,5	8.04	13.5	11.01	11.1	3 C	1,01	1.5	3.7-	0•2-	-12.7	-14,3	4.02-	-31.0	1.10-	9,42	0.04	7 4 7 7 1
SIGNETIC 14 LHI TABLE 6	TEMP AIR DESKELS	24.3	21.6	20.0	19.3	17.0	16.6	12.0	6.2	7.5	-3.9	5.5	27.5	18.5	-12.8	-16.1	-20.3	-22.2	-32.4
45.L M	PHESSOME GEORETHIC ALTITUDE MILLIPARS 115L FEET	3089.0	5075.3	5732.8	6.5049	6.7777	8484.0	10527.8	12879.9	16724.7	16336.2	19492.0	20446.1	21299.3	23683.7	25144.0	26564.8	27927.6	32,051.8
90c 3y89.00 FEET NSL 090c BBS 8.0T	RILLIBAR BUZZJAG	882•B	8.058	9-36-6	611.2	772.6	755.4	760.0	2.24g	0.955	522.8	0.693	8.184	461.10	8-624	0.004	377.6	0.150	300.0
5741104 ALTITUDE - 11 JULY 61 ASELISIOS, 40, 44																			

•		•	;	_	UPPER AIN UNI	Unla		i	,
SIAFICE ACTION	L	3989*10 FEET M	1 25C		1920020447	\ = :		0£00£11	GEODETTIC COURT INATES
ASCENSION NO	6447		- 2		WALLE SALIDS			32. 106.	32.40043 LA! DEG 106.37033 LOM JEG
				_	TABLE 7				
of One TREE	PRESSURE	TEM	TEMPERATURE	REL.HUM. DELISIT,	DENSIT,	St EEU of	INU DATA	T A	Inct x
ALTITUDE MSL FEET	MILLIDARS	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	GM/CUBIC METER	SOURD NIVO ES	UINECTION DEGREES(TN)	SPEEU Ki40TS	OF REFRACTION
3989.6	882.8	24+3	15.5	58.0	10201	674.4	210.6	4.1	1.000304
4600.		24.3	15.5	58.0	1025.8	4.470	508.4	4.1	1.000304
4500°		23.0	14.7	59.4	1012.0	_	190°8	5.7	1.040298
5000-0		21.8	13.9	60.8	6666	_	100.9	7.6	1.000292
550a.c	837.4	20.6	13.6 23.6	64.2	986.2	-	175-1	7.6	1.000208
0.0000	800.4	19.1	11.1	59.6	957.5	6666.1	172.5	10.8	1.000272
7000.0	794.2	18.3	11.1	65.9	543.3	_	171-1	10.1	1.000269
3.00%/	780.3	17.5	11.1	66.2	929.3		100.00	6∙8	1.000266
ە(ئان) ئ	760.5	16.9	4.7	62.7	915.2	_	172.2	B.3	1.000258
0.500.	750.6	16.6	± • €	51.1	901.0	_	178.1	7.7	1.000244
9000c	73%5	12.	٠٠ نو	55.0	888.3		167.6	9	1.600242
0.0036	7.0.4	14.0	**·	59.0	875.R		193.4	ກ :	1.000239
0.00001 0.00001	7007	12.7	0 · 0	66.9	855.5 351.5	0.000 0.000 0.000 0.000	100.0	t =	1.000237
11000	0• ≎00	10·8	, N	68.0	834.0		171.4	4.5	1.000229
11500.0	670.5	9.6	4.2	69.1	826.4		170.6	5.5	1.000224
12000.0	663.2	₩. ₩	3.3	70.1	817.1		172.5	0.9	1.000219
12509.6	651.2	7.1	2•3	71.2	800.0		172.5	6.2	1.000214
Totalo.	634.5	0.9	1•3	71.7	794.7	_	1/204	9. 9	1.000210
15500-0	627.4	2.5	∾ °	70.5	782.4	_	1/1.1	0 u	1.640209
14000.0	9.610	0 4 • #	6.1	0000	75.0.4	1.000	1001	0.0	1.000200
15000	593.1	2.7	0.6	62.9	740.0		157.0	4.7	1.00.0191
15500.0	584.1	1.8	-4-1	64.5	735.3	_	159.0	5.4	1.000135
10000.6	571.3	1.0	2.S-	63.1	724.(1	_	7.01	5.	1.000182
1.5000.01	560.7	ņ,	ئ. ئ	61.6	712.0		170.9	ာ လ	1.000178
17:00:0	2.000 8.050	5 6	0 • / • I	1 • C 9	702.1	543.7	9.677		1.001175
0.000041	524.6		7.7-	70.5	681.4		11.7.1	7 · K	1.000170
10500	519.5	1 • 4 -		70.6	671.1		1:0.0	0.5	1.00010
19000.0	509.6	1.4.	-10.0	63.2	660.0	_	146.7	1.6	1.500101
19590.C	467.8	-5.3	-12.7	55.8	0.649	_	141.5	10.3	1.000157
ระบบบอะจ	496.5	្ស • ១៖	-16.0	46.4	634.5	_	2.0+1	7°01	1.00152
2050IA+0	E : : : : : : : : : : : : : : : : : : :	۲۰/-	/•61-	35.9	621.9	-	7 · C · C · C · C · C · C · C · C · C ·	10.5	/ #TubleT
7 100 T 7	471.5 5.11.5	£	-23.5	20.00	613.0	_	Λ•0±1	C . O .	5 411001 - 1
3.000.7	6.704	÷ 6		6.02	6.709	_	# 0 1	7 · · · · · · · · · · · · · · · · · · ·	PC1000.1
7.00.1.	C 17	0.01	4.77	2000	2.5.50 1.0.00 1.0.000		0 • 60 T	* 4 · O	1.0.0.1
. * VIII (77)	t	V	サーン・コー		57.4.1	C • T > O	1.47. I	2	1 - 1001.52
r. E. Fallow	י ר	J . T .	***	•	1 • 6	_) · · · · · · · · · · · · · · · · · · ·	•	30 TILLIN T

6200LT1C COURDIMATES 32.40043 LAF LEG 106.37033 LON UEG	INULA OF REFRACTION	1.000130	1.000127	1.000120	1.000124	1.000162	1.000121	1.000119	1.000116	1.000114	1.000111	1.000109	1.000108	1.000106	1.600104	1.000102	1.000101	1.000099	1.000/1
010011 32. 106.	TA SPEEU KNOTS	11.6	11.9	11.4	10.9	9.6	0.6	9.5	10.2	12.5	14.5	16.3	17.6	18.9	21.2				
	"INU DATA UTIRE TTU: S DEGREES (TN) K	1.001	123.4	153-1	117.5	109.5	101.1	2.66	101.0	107·U	106.0	103.7	93•1	た・かん	45.7				
7 2 2 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SPEED OF SOUND KNOTS	629.h	626.4	620.0	5.679	623.5	621.7	619.9	618.4	618.0	617.0	015.5	610.9	614.4	610.3	6.809	607°H	600.2	2.409
UPPLR A1N DATA 1920020447 HITE SAIUS	DENSITI GM/CURIL METER	8.695	560.9	552.5	544.3	530,3	524.6	521.0	512.0	503.0	494.3	480°4	473.6	471.0	463.5	456.1	6.04t	441.8	#3#°#
- F	REL.HUM. PERCENT	20.1	20.6	22.9	25.3	30.0	35.6	41.3	34.3	25.5	18.0	18.1	18.3	18.4	18.5	18.6	18.7	18.9	19.0
T MSL N DT	TEMPERATURE R DEMPOLIT EES CENTIGRADE	-30.3	-31.0	-30.9	-31.0	-30.5	-30.0	-29.8	-32.5	-36.1	1.04-	-41.1	-42.1	-43.0	0.44-	-45.0	-46.9	0.44-	0.84-
39.59.60 FEET MSL 0909 HRS MDT 7	TEMP AIR DESRÉES	-12.1	-13.1	-14.4	-15.7	-17.1	-18.6	-20.1	-50.9	-21.6	-22•4	-23.6	6.42-	-26.1	->7-3	-28.6	-29∙8	-31.0	-32+3
	PRESJURE MILLIUARS	421.2	418.8	410.5	40%	394.3	330.4	378.6	370.9	363.3	355.9	346.5	341.2	354.1	327.1	320.3	313.6	307.1	300.7
STATION ALIIIUDE 11 JULY 61 ASCENSION NO. 44	GFUNETRIC ALTITUDE MSL FEET	23500·¢	0•6004 ₹	24500.0	J•000cz	25500.4	0•000a≥	20500.0	27000.0	c.005/2	200005	285AA+9	7.3006.7	0.00462	30000	30500.0	31000.0	31500.0	32000.0

0.4	510												
~		6./	10.6	7.5	4.1	0.3	4.6	8.0	10.3	10.5	10.6	15.9	
#1:10 C	DE GKLES (TN)	179.9	171.9	179∙⊍	100.2	172.5	150.1	179.8	141.5	158.0	115.4	104.3	
NEL MULT		h1.	64.	54.	٠/ ٢	71.	./9	63.	50.	-12	20.	18.	19•
ERATURE DEMPOL.1	CENTIGRADE	13•н	11.1	4.9	6.1	2.5	-2.4	-7.0	-12.7	-28•0	-31.1	6.04-	-48.1
TEMP AIR	DEGINEES	21.6	13.6	16.3	12.0	7•0	3.2	6:	-5-3	9.6-	-16.1	-23.4	-32.4
EOPOTIMIAL	FELT	5072.	6790.	8603.	10'517.	12540.	14607.	16988.	19464	22155.	25105.	28353.	31907.
PRESSURE GE	MILLIGARS	850•0	₽•00A	0.057	0.007	U•059	0.009	550.0	500.0	0.054	U*60h	350.0	0.005
	REL.MO WIND DATE	GEOFOTINIAL TEMPERATURE MEL-MILM. AIR DEMPOIM PERCENT DIME FELT DEGREES CENTIGRADE DEGRE	GEOPOFFNIAL TEMPERATURE REL-HD WIND DAIR AIR DEWPOLLS PERCENT DIRECTION FELT DEGREES CENTIGRADE DEGREES(TR) 5072, 21.6 13.4 hl. 179.9	GEOPOFFNTIAL TEMPERATURE REL-NID WIND DAIR AIR DEMPOIL PERCENT DIRECTION FELT DEGREES CENTIGRADE DEGREES (TN) 5072. 21.6 13.4 h1. 179.9 10.6 11.1 b2. 171.9 10.0	GEOPOFFNTIAL TEMPERATURE REL-NID.1. WIND DATE AIR DEWPOIL.1 PERCENT DIRECTION FELT DEGREES CENTIGRADE DEGREES(TN) 5072. 21.6 13.4 61. 179.9 6790. 10.6 11.1 62. 171.9 10 8603. 16.3 6.4 52. 179.0 10.1 10.2 10.5 10.2 10.5 10.3 10.5 10.4 10.5 10.5	GEOFOTFNTIAL TEMPERATURE REL-MID WIND DATE DEWPOL PERCENT DIRECTION AIR DEWPOL PERCENT DIRECTION DEGREES CENTIGRADE DEGREES(TR) 5072. 21.6 13.4 61. 179.9 10.570. 13.6 11.1 62. 171.9 10.1 61.0517. 12.0 6.1 61. 61.	GEOFOFFNTIAL TEMPERATURE REL-MID WIND DATE DEWPOLL, I PERCENT DIRECTION AIR DEWPOLL, I PERCENT DIRECTION DEGREES CENTIGRADE DEGREES (TR) 15072. 21.6 13.4 61. 179.9 10.570. 13.6 11.1 62. 171.9 10.1 65.0 10.517. 12.0 6.1 67. 100.2 12.540. 7.0 2.2 71. 172.5 6.1	GEOP-OFFNIAL TEMPERATURE REL-HID WIND DARFET DEWPOL PERCENT DIRECTION DEGREES CENTIGRADE DEGREES(TR) 5072. 21.6 13.8 61. 179.9 16 603. 16.3 6.4 52. 171.9 16 10517 12.0 6.4 52. 179.0 12540. 7.0 2.2 71. 172.5 6.1 12540. 3.2 -2.4 67. 15611 4.667.	GEOPOFFNIAL TEMPERATURE REL-HILL. WIND DARFELS OF THE DEWPOLAT PERCENT DIRECTION DEGREES CENTIGRADE DEGREES (TR) FELT DEGREES CENTIGRADE DEGREES (TR) 5072. 21.6 13.4 h.l. 179.9 10 6790. 13.6 11.1 62. 171.9 10 10517. 12.0 6.1 h.l. 180.2 12540. 7.0 2.2 71. 150.0 14667. 3.2 -2.4 67. 150.1 169809 -7.0 63. 179.9	GEOPOFFNIAL TEMPERATURE REL-HILL. WIND DARFERS DEWPOLAT PERCENT DIRECTION DEWPOLAT PERCENT DIRECTION DEGREES CENTIGRADE DEGREES (TR) 5072. 21.6 13.4 61. 179.9 10 6790. 18.6 11.1 62. 171.9 10 10.17. 12.0 6.4 52. 179.0 10.17. 12.0 6.1 6.1 6.1 6.1 10.2 12.0 12.0 12.0 6.1 12.	GEOPOFFNTIAL TEMPERATURE REL-HILL. WIND DARFERS DEWPOLAT PERCENT ULARCTION DEWPOLAT PERCENT ULARCTION DEWPOLAT PERCENT ULARCTION DEGREES CENTIGRADE DEGREES (TR) 13.4 bl. 179.9 bl. 12540. 12.0 bl. 12.5 bl. 12.5 bl. 12.5 bl. 194645.3 -12.7 bl. 11.5 bl. 1	GEOFFNTIAL TEMPERATURE REL-HILL. WIND DARROLLIS PERCENT ULARCTION DEWPOLLS PERCENT ULARCTION DEWPOLLS PERCENT ULARCTION DEWPOLLS PERCENT ULARCTION DEGREES CENTIGRADE DEGREES (TN) DEGREES	GEOFFNTIAL TEMPERATURE REL-HILL. WILLD DAR DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT ULACTION DEWPOLLS PERCENT DEWPPOLLS PERCENT DEWPOLLS PERCENT DEWPOLLS PERCENT DEWPOLLS PERCENT

in Service Tree

~	MSL T	SIG ₁₄ F ICAN 1920 LC-37	SIGIIFICANT LEVEL LALA 19201HII152 LC-37	۷۱۶	GEODETIC COURITMATES 32.48175 LAT DEG
. KS10t, t.0. 152		TABLE 9			106.31232 LON DEG
Phessul	PRESSURE GEOMETRIC	1EMPERATURE	ATunt .	R.L. HUM.	
	ALTITUDE	A1R D	DEMPCINI	PERCENT	
MILLIBAR	MILLIBARS MSL FELT		EN116KADE		
880.6	4051.4	28.3	15.4	0.67	
876.2	4196.9	25.3	10.5	48.0	
850.0	5070.4	22.6	13.4	56.0	
8-838	5791.2	20.5	14.2	0.60	
9•008	6771.4	18.0	11.8	0.7.0	
781.8	7441.1	18.0	8.8	55.0	
715.6	9913.2	13.4	0•7	01.0	
1000	10522.4	11.8	1.0	0.80	
671.2	11673.8	8.7	1.0	0.80	
9.449	127/1.3	6.5	<.2	74.0	
610.0	14254.5	3.6	-1.7	0.80	
8.109	14616.0	3.0	-1.7	71.0	
8•485	15378.3	1.5	ان، د	0.60	
559·4	16552.9	-	-p.7	0.00	
518.8	18523.5	9•#-	-0.5	76.0	
200.0	19477.6	0.9	-15.0	0.04	
8.674	20536,9	-7.7	-17.5	45.0	
h•h9h	21369.8	-9.1	-43.4	31.0	
9.644	22192.5	-10.3	1-5:2-	د7.0	
0.004	25121.7	-16.2	-30.4	78.0	
377.8	26525.5	20.5	-32.6	32.0	
357.6	27401.0	-22.0	-3B	0.02	
4.4415	23767.7	-24.3	-41.5	19.0	
312.6	31007.4	-29.7	4・24-	20.02	
300.0	32027.3	-32.8	0.04-	0.02	

0E01)_TIC_C0016D_HATES 32.40175_CAT_UEG 1U6.31232_L017_CEG	THULX OF REFRACTION	1.000297	1.000264 1.000279 1.000270	1.330258 1.000258 1.030249 1.000244	1.000240 1.000236 1.000234	1.00022 1.00022 1.000218 1.000215	1.000195 1.000200 1.000196 1.000192 1.000167	1.430178 1.60.0175 1.10.0172 1.10.0170 1.00.0167 1.00.0161	1.000149 1.000144 1.000144 1.000141 1.000141 1.000135 1.000135
0£00LTIC 32.4 106.3	SPELU SPELU KuOTs	7.0	7.8 3.6 9.5	9.6 7.9 8.1	2.50	24000 20400 20400		3 7 9 7 5 3 3 ;	11.2 12.2 10.0 10.0 9.6 9.6
	THU DATA DIRECTION S DEORECS(14) K	2050 1930 1810	1/0.0	171.5 174.5 187.9 195.4	200.3	179.6 171.0 171.0 171.5	10.95 10.05	100.7 175.7 100.7 100.7 100.7 100.6	166.7 144.7 114.7 115.7 115.7 115.0 115.0
741K	SPLEU OF SCUIND KNOTS	674.3		0000 0000 0000 0000 0000					0.56.2 0.55.2 0.50.1 0.52.2 0.52.2 0.54.3
01918 A15 DA16 1920180152 LC-37 TABLE 10	DENSITI S GM/CUBIC METER	1010.1	983.9 971.4 958.6	924.7 915.2 902.0 889.0	870-1 863-6 851-9	840.8 829.8 813.1 800.1	782.6 771.1 759.4 747.9 730.5	712.0 702.1 691.8 681.7 671.8 661.2	640.0 623.7 613.0 603.4 599.4 589.6 571.0
	REL.HUM. PERCENT	45.0 50.8 55.4	57.8 60.7 64.8	55.0 57.4 58.4 58.6 58.6	60.0 62.0 67.7	68.0 68.0 69.8 72.5	71.1 69.0 70.0 70.0 68.1 64.2	60.4 63.6 67.7 71.7 75.3 62.5	47.0 45.1 37.2 30.4 27.9 27.1
TSL 10	TEJAPERATURE R DEWPOINT EES CEJATIGRADE	13.5	12.7 12.2 11.9	8.8 7.7 7.7	6.5 6.1	4 0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-7.6 -7.3 -7.7 -7.7 -8.1 -11.3	-16.2 -17.4 -20.4 -25.0 -25.1
4051.37 FEET 1.151 1000 185 10 1	TEMP AIR DEGRÉES	28.3 24.4 22.8	21.3 20.0 18.7	17.9	13.2	10.5 9.2 8.0 7.0	10040 0400 0400	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-6.8 -7.6 -7.6 -9.3 -10.0 -11.9
ية ر	PRESSURE HILLIJARS	880.6 867.9 852.1	837.3 822.7 800.3	780.2 760.3 752.7 733.4	720.3 710.4 700.6	687.9 675.5 665.2 651.1	627.4 612.8 612.8 593.2 592.1 571.2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	469.9 471.2 471.2 471.2 45.0 45.0 435.3 43.3
STALLON ALTITUD 11 JOLY e1 ASCLMSION NO.	GFUNETRIC ALTITUDE NSC PEET	4051.4 4500.0 5809.0	5596.0 5596.0 5597.0 7597.0	7500.0	9500.0 10000.0	11509.0 11509.0 12000.0 12500.0	13500.0 14600.0 14500.0 15500.0 16500.0	10500.0 17500.0 17500.0 10000.0 10500.0 19600.0	200000 2150000 2150000 2250000 2250000 2350000

52-40175 LAT DEG 52-40175 LAT DEG 106-31232 LAH DEG	, ,	Y JOH Y	OF REFRACTION		1.00.1	1.000126	1.0001	1.000122	1.000120	1.000118	1.600116	1.000113	1.600111	1.010109	1.000108	1.000100	1.600104	1.000102	1.000101	6500010-1	1.00097
0L0DET1 52. 146.		ς:	SPEED NIIOTS		10.6	11.3	11.1	10.9	10.6	10.6	10.8	12.3	13.9	15.8	17.3	18.5	21.3				
	A 1 A 2 1 4 1 4 1		DINECTION DEGREES(10)		113.1	115.0	110.2	104.5	2.50	6.16	98•1	7.00	100.0	91.6	21.6	6.76	9506				
In I A	SON'T		ONOS STONE		**/70	5.020	6.479	6,50	07.1.6	019.6	610.9	01001	617.0	615.5	613.4	C.710	6119	9.609	6000	606.1	604.1
1920184152 1920184152 LC-37	_		GM/CURIL N. TER		h · Toc	550,0	544.	530.0	520.2	520.5	511.4	502.3	493.8	480.1	478.4	470.1	463.1	455.6	446.	441.6	435.1
-	TABLE 10		PERCENT	2.60	2	27.8	28.0	29.1	30.5	31.9	27.7	23.2	19.8	19.3	19.1	19.3	19.5	19.8	20.0	20.0	20.0
T 8.5L 8 DT	TEMPERA, TURE		AIR DEMPOINT DESPENDE	5 6 1	0.03	h•62-	-30.5	-31.0	-31.7	-32.5	-34.6	-36.9	-39.2	-40.5	9-14-	-42.5	す・パカー	た・サヤー	-45.2	-46.5	6.14-
4051+37 FEET MSL 100n HRS N DT 2	TEMP	•	A.1K Degrees	0.7	`	6.41-	-16.0	-17.3	-18.7	-50.1	->0·8	-21.5	-22.4	-23.6	-24.A	-20.0	-27.2	4-82-	-59.5	-31.1	-35.7
1119bc 405 104 152	PRESSURE	•	MILLIDARS			410.0	401.9	392.9	3000	370.2	370.5	365.6	350.5	340.2	341.0	333.9	327.0	320.2	310.5	300.9	300.4
STALION ALIITUDE (11 JULY AL ASCLIISION (00 15)	OF UAR TRIC		ACITIONE MSL FEET	2.0004		2450A.F	ë•000ç₹	u•00552	COUUU.7	J•00°;02	0.00072	27500.9	2000c	20500.0	0.00063	2950P.P	∂€0000 €	30500.0	3100E.E	0.150n.a	5500n.c

OE. ODE TIC. COOKUTMATES 52.40175 LAT LEG 106.51232 LON DEG														
vE.UDE 71C 32+4 106+3	UA FA	N) KN01S	7.2	10.0	2.6	2.7	8.0	6.0	£.3	7.9	6.6	11.1	15.3	
	AINO DAFA	DEGREES (T	179.5	161.3	169.7	197.4	171.5	100.1	195.4	153.0	129.9	108.9	98.5	
LVELS 52	NEL . HUR.	TENCEN.	50.	67.	58.	• 20	73.	71.	• 4')	*6#	27.	20.	19.	20•
, "NDATORY LLVELS 1920181152 LC-37 TABLE 11	TEMPERATURE	DEGREES CLNTIGRAUL	13.4	11.7	7•6	6.1	7.e	6.1-	-7.n	-15.0	-25.b	-30.4	-40.5	-48.0
1 1	TEMP	DEGREES (22.6	18.0	15.8	11.8	7.0	2 · P	-1.0	0.9-	-10.3	-16.2	-23.3	-32.8
T ASL T	OPOTENTIAL	FELT	5067.	6787.	8299.	10512.	12532.	14678.	16977.	19450.	22135.	25079.	28327.	31962.
JDL 4 u51. 37 FEET MSL 1000 HRS N.DT 152	PRESSUKE GEOPOTENTIAL	MILLIPARS	0.069	₽.00°	750.0	J.007	6.50.0	3• 00 →	550.n	500.0	450.0	0.004	250.9	300.0
STATION ALTITUDE 4. 11 JULY 81 ASCENSIUN NO. 152														

STATION ALITTUDE 3989.AO FEET MSL 11 JULY 8:1 ASCENSION NO. 448	јј	SIG.11 IC/ 192 2011 2011 178LE 12	SIGATI ICANT LEVEL DATA 19200/19446 MHITE SMIDS	,A I A	SEOULTIC COUNTITATES 52.44843 LAT NEG 106.37033 LOH DEG
PNESSUME	PHESSUME GEOMETHIC	TEMPL	TEMPLRATUME	R-L-HUNI.	
WILLIBARS	ALTITUDE VICLIBARS NSC FELT	AIR DEGLELS	AIR DEWAGINE DEGLES CENTIGRADE	PERCENT	
882.2	3989.0	29.3	14.7	0.1	
£5n•Û	5070.4	25.0	1, 0	D•04:	
795.8	2.955.0	19.6	11.1	0.85	
730.8	9348.3	14.7	0.0	0.56	
0.007	10540.6	11.8	7•0	0.40	
h•6h0	12592.5	7•6	6.1	0.70	
031.8	13336.3	6.4	0.1	0.10	
	16348,3	~	0.0	63.0	
8+544	16753.2	-:-	٠,٠٠	0.40	
	16323.9	4.4	1.01	75.0	
	19507.9	-5.4	-14.6	984	
	<1206.2	-8-4	4.47-	70.0	
6.004	25154.6	-16.2	9-36-	22.0	
	26884.7	-20.5	-57.0	<1.0	
\$53.8	27814.9	-21.7	30.05-	70.0	
2000	32004	C.CK.	- 6.79	9	

stallon pelitube 11 July el Ascessios po	UDE 3/9	3989•00 FEET ⊌S 120c HRS M DT 8	т _н 5с. м 0Т		UPPLR Ain DAI 1920D20440 WHITE SMBDS	4 3 3 3		o£ ODE 11: 32• 106•	0E ODE TIC COUNDITIATES 32-40043 LAT DEG 106-37033 LOIT DEG
					TABLE 13			,	
GFOIN, TRIC	PRESSURE		TEMPERATURE	REL. HIM.	DENSITY	SPLLO OF	INC DATA	TA	X total
ALTITUDE MSI EFFT		A18 04 (34) 570	DEWPOINT Coll.Trolland	PERCENT	CM/CUBIC M. TER	Country	ULKEL LIGHT	SPEC COTA	06 30 + 30 - 3
		()(())			נוני	5 1014	DESKLEST	0	NET 11 OF
6.6895	882.2	29.3	14.7	41.0	1000.B	0.080	170.0	5.1	1.000294
Ů*600t	801.9	29.3	14.7	41.1	100001	6.670	1.01	5.1	1.000294
4500.0	860.8	27.3	13.7	43.4	99003	67/10	172.5	t.3	1.000209
C•6000	852.1	25.5	12.1	45.7	980.1		1.4.1	7.6	1.000233
0.00°C	831.3	25.A	12+3	48.7	97,00		175.6	٠.5 و•3	1.000279
0.000	822.d	22.3	12.0	51.9	963.8	n-17a	1/3.5	16.0	1.000276
6.0000	700.5	6.02	9.5	55•I	931cb	5.U/q	6.8/T	10.5	1.000272
7, 66 7	0.467	0.61	0-17	,	5.70h	0.000	7.55	3.01	1.000268
	7,000	0 t	. 5 • 6	50.00 50.00	960.9	~	7 · 60 T	ى ئ	1.00000
0.00	715 2. 2			000	T•4:16	6.000	C • 96 T	• 0 • r	1 0 0003
00000	730.07	10.	7•/	0.63	G*105	0.+00	7.002	K • L	7 +20000
0.0016	720.8) H		0.4 % 0.4 %	809.0	#•cua	0.000	1.	1.000.1
	713.8		0.0	0.00	7.010	1000	0.167) ·	0.000.000
3.10101	701.0	100	N 6	0.00	0.4.00	1.000	19161	- r	1.0.0041
0.00011	Ú884.3	0.01	0 a	64.7	0 · 7. 0	6584	150.00	3	1.000021
11500-0	6779	K	. · ·	65.4	7 7 6	# 0000	7.007	0 *** * 4	1-000222
1/10000	660.6	8.8	÷.	66.1	815.4	0.000	157.5	2.0	1.000218
145,000.5	651.6	7.8	5.0	6.99	804.7	_	102.7	9. 5	1.600213
15060.0	039.7	6•9	.	63.7	792.tb		1.3.6	3.5	1.000207
13500.0	657.9	6.1	6•-	61.1	7811.7		1.6/1	3.3	1.000202
14000	610.3	5.0	-1.8	61.4	7.692	650 • B	105.4	3.3	1.00198
145,00.4	6**09	0•4	7.5-	61.8	757.9	_	7.00T	&. -	1.000194
15000	90.60	O•5	-3•6	62.1	740.7	040.3	1/8-/	6.2	1.000190
15500	9.285	1.9	ស •	62.4	735.7	C4 7• 1	1.001	7.2	1.000166
Teller	3/1/8	•	ار ان ا	62•₿	724.3	2.040	101	7.8	1.000162
17000-0	540.6	- a	۳ - ا ا	5.4°C	713.7	2.772	** VOT	٥٠,٢	1.000178
175,00.0	5411.2		- C	0 1 1 4	697 7		1/101	4 29	1.600172
13000	529.9	1 47		70.7	68 1	4 0 0 0 0	174.5		1,10001
13,00	513.0	1 2 4		71.0	677.1	0.000	200	N. 5	
19600.0	503.0	-5.0	-11.6	57.6	661.1	t.50.to	107.1	8.8	1.010101
1.9500.0	500.5	-5.4	-1446	48.2	8.649	638.0	1001	12.0	10111155
<i>5</i> ∙0000>	490.5	-C•3	-17.1	41.6	639.5	6.50 - 6	100 1	14.0	1.000151
200000	481.6	-7.2	5. CI=	35.1	659.4	1.000	165.5	15.6	1.000147
C1000-2	471.8	-8.0	-<3.0	28.7	619.4	634.6	157.0	13.9	1.000143
<1500.12 . 1100.0	9.79%	0.5-	0 • C 2 • C	25.7	603.6	4.000	1,00,1	12.5	1.:00140
U + 13 11 12 7	0.00	0.0[-	-26•1	2.62	5.74.6	650.0	3 • CO T	71.	1.500138
7.000,77	0.444	-11-0	2-7-2	24.7	₹•068 •	a.¶.;a	1.006	11.6	1.00135
3 • DUUC >	430.0	-11.9	120+3	24.5	584 c	U. J.R	141.5	11.5	1.000153

6LODETIC COCAUTHATES 32-40043 CAT LEG 106-37033 COTT DEG	Ihark K Or REFRACTION	1.000150	1.000128	1.000126	1.0000	1.0001.1	1.000119	1.11,1117	1.000115	1.000113	1.100111	1.00109	1.000108	1.0000100	1.60104	1.0.10102	1.000101	1.000099	1.000 P
6L 0DE T10 32• 106•	SPFEU NIOTS	11.5	11.6	12.2	12.9	13.4	13.8	14.0	14.3	15.0	15.8	16.9	16.1	19.4	20.9	22.5			
	WIND DATA UTHECTIO ST UEGREES(11) AT	115.7	100.0	9.66	9n•9	79.0	102.6	10/01	113.0	9.011	1111.7	113.0	108.7	103.9	100.5	70.0			
71 Y	SPEED OF SOUND NIGHTS	_	4.1.20			623.5											608.1		0.500
1920020446 1920020446 WHITE SALIDS TABLE 13 CONT	DEJSITI OM/CUBIC METER	571.6	562.5	553.n	544.8	53n.4	520.1	520.0	511.8	504.h	0.464	480.1	476.4	470.H	465.3	455,9	440.7	441.0	434.6
	REL.HIM. PERCENT	23.7	23.2	22.7	22.2	21.8	21.5	21.2	50.9	20.3	20.0	20.2	20.3	20.4	20.5	20.6	20.7	20.9	21.0
1 .45L N D i	TEMPERATURE AIR DEMPOINT DECRÉES CENTIGRADE	-29.3	-30.4	-31.5	-32.6	-53.7	-34.9	-36+1	-37.2	-38•0	-38.9	-39.9	6.04-	-41.9	6•24-	-43.9	6.44-	-45.4	6.91
3y89*r0 FEET ASL 120^ HRS NDI 8	TEM AIR DECREES	-14.9	-13.9	6.41-	-12.9	-17.1	-16.3	-19.5	9•02-	-21.3	-22.2	-53.4	9.46-	6-52-	-27.1	->B+3	-29.6	-30.8	-35.0
111UDE 3599 100- 448	PRESSURE HILLIDARS	427.2	413.8						371.0										
STATICH ALITIUDE 3 11 JULY 81 ASCENSION NO. 448	GE UNE TRIC ALTITUDE NSL FELI	3.000cz	34000-6	24500.0	25000•6	25500•0	20609°n	ジ・0りなのタ	21000Z	27500.5	C 4 900 0 3	C-00582	0.00062	6.9500.0	20000	0020G	21000.0	31500.P	J•00022

GE CULTIC COOKUTNATES 32.40043 LAT DEG 106.37033 LON DEG	2 <u>5</u>	
61 CU	ALM, EMIA CTION SPEED LS(TN) KNOTS	1.00 10.05 1.77 1.77 1.70 11.70 11.71
	ALM. EV DIM, CTION DESKELS(TN)	174.5 186.1 201.2 172.9 165.7 179.3 186.0 191.3
Lytls 40 IDS	NEL . HUI.	2
LAMDATORY LLVELS 192002.440 KHITE SMINDS TABLE 14	TEMLERATURE AIR DEWPOILL DEGREES CENTIGRALE	12.6 11.3 6.5 6.5 7.4 13.0 13.0 13.0 13.0 13.0 14.0
:	AIR DEGREES	25.0 2000 116.2 11.8 7.7 3.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1
T ASL a Di T	PRESGURE GEOPOTINITAL ILLIPARS FEET	5067. 6060. 8517. 10530. 12554. 14706. 17007. 19430. 22169. 25112. 28363.
JOL 3989.00 FIET MSL 12nv RRS a DT 448	PRESSURE 6 MILLIPARS	7500 7500 7500 7500 7500 7500 8500 8500
STALION ALTITUDE 11 JULY AL ASCENSION AU		

OE ODE TIL COORDINATES 52-40175 LAT DES	100.31236 [0] 026																													
ATA		REL . HUPi.	PLKCENT		0.7.	45.0	46.0	48.0	94.0	0.90	0.60	52.0	0.60	0.50	0.50	0.60	57.0	01.0	74.0	29.0	0.8⊁	53.0	41.0	0.97	0.02	25.0	23.0	0.02	70.0	74.0
SIGAIFICANT LEVEL DATA 19201an155 LC-37	2	TEMPERATU .E.	DEMPOINT	DEGREES CENTIONALE	15.0	15.1	14.3	12.9	16.4	10.2	7.00	0.0	7.0	0.	-1.2	0.2	4.1-	9.1-	70.5	-12.1	-14.6	-13.7	-19.3	#.55-W	7.00-	-21.1	31	-37.9	144.0	140.2
SIGAIFIG 15	TABLE 15	16 MP	AIR	DEGREES	31.5	29.3	6.46	54.6	21.9	16.6	14.6	12.6	8.5	6.1	8•4	2.5	0.	-1.1	-4.3	-5.4	-5.4	-6.1	-8-4	-9.5	-12.4	-15.6	-17.0	-21.0	-59.0	-31.7
		PRESSURE OFOMETHIC	ALTITUDE		4051.4	4340.4	51,52.8	5728.3	6784.7	8566.1.	9658•6	10546.6	12268.5	13431,1	14211.6	15491.9	17112.6	17528.4	1879b.6	19531.9	19697.8	20574.3	21432.2	22314.1	24112.2	25200.0	25941.6	27817.0	31168.9	32132.4
4351.37 FEET MSL 1200 HRS N.DT)	PRESSURE		FILLIPARS	9.678	671.0	0.050	030 • 4	ტ• UOΩ	751.6	722.8	700.0	4.75J	624.8	611.8	583+2	948.6	540.0	514.4	50n·0	496+8	480.2	†• †€	9.844	417.8	0.004	388.2	359.6	312.6	300.0
STATION ALTITUDE (11 July 81 ASSESSION 60. 18																		•												

TABLE 16 Table 16	STAFION ALTITUDE 11 JOLY 81	τυυι	4051-37 FLET ASE 1200 HRS MDT	T .4SL M.DT	-	UFPLR AIN UNIA 19201/0155 LC~37	A1 1.0		0E 0DL 11	0E 0DE 11C COURTINATES 32-40175 LAT DEG
PRESSORL TERPERATURE RELLINGM DENSITE SPELD OF IND DATA INCOME. SOURD DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD OF MALES CHILDRANG. SURIND DIME, TOWN SPELD DIME,	ice;;510 _i ,	103			,- -	ABLE 16			106.	31232 LUII 1/EG
### OFFICIAL PERCENT ONCORDIL SOURH DILE, TION SIGED ### ALTER OFFICIAL SCHILLIORADE ### ALTER OF	One TRIC	PRESSURL	TERR	ERATORE	REL.HUM.		SPEEU OF	INL UA	14	Itabl A
879.6 31.5 15.0 37.0 994 60.0.5 6.0.0 9.2 951.5 27.1 114.4 42.9 994 10.14 10.2 951.6 27.1 114.4 47.3 96.19 17.9 10.1 952.6 12.4 12.4 97.2 17.9 10.7 703.4 12.4 12.4 96.19 17.9 17.9 703.4 12.4 12.4 96.1 17.9 17.9 703.4 12.4 12.4 96.1 17.9 17.9 703.4 12.4 12.4 96.2 17.9 17.9 10.7 703.4 16.3 11.5 12.6 17.9 10.2 10.0 10.	TITHUE SE FEET	AILLIBARS	AIR DEGREES	DEWPOINT CENTIGRADE	PERCLIIT	GM/CURIC METER	SOUM) KIOTS	DIRECTION DEGRECS(111)	SPEED KNOTS	OF REFEACTION
6bc, 3 26.40 14.9 42.9 992.1 177.5 171.4 9.2 93.0 25.4 13.4 47.5 96.9 177.5 171.4 10.7 93.0 25.4 12.7 47.5 95.1 177.5 177.9 12.1 94.0 25.6 12.4 47.5 95.1 177.9 13.3 11.1 75.4 12.4 95.5 93.5 170.7 177.9 13.3 14.1 17.5 11.5 17.5 11.5 <td< td=""><td>+051-4</td><td>879.6</td><td>31.5</td><td>15.0</td><td>37.0</td><td>4.066</td><td></td><td>J • 0,13</td><td>0.0</td><td>1.000292</td></td<>	+051-4	879.6	31.5	15.0	37.0	4.066		J • 0,13	0.0	1.000292
351.5 27.1 11.44 45.7 986.9 677.5 154.6 10.7 357.0 25.4 12.4 47.3 986.9 675.5 175.0 142.4 357.0 25.6 12.4 47.3 986.7 175.0 142.4 360.0 12.4 12.6 55.4 945.7 175.0 142.4 750.0 11.5 10.9 62.2 945.7 175.0 16.5 750.0 11.5 10.9 62.2 945.7 177.9 16.5 750.0 11.5 10.9 62.2 945.7 177.9 16.5 750.0 11.0 10.9 62.2 945.0 177.9 16.5 750.0 11.0 10.9 62.2 945.0 177.9 16.5 750.0 11.0 10.0 10.0 177.9 10.5 177.9 750.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0	4509.0	860.3	28.8	14.9	45.9	997		1.1.4	9.5	1.00.0292
937.0 25.4 13.4 47.3 969.9 675.5 12.4 13.4 47.3 969.9 675.5 12.4 13.4	5000	•	27.1	1,1.4	45.7	980.9		15.4.6	10.7	1.000208
92.6.6 23.9 12.7 49.5 95.1 073.7 175.0 14.1 93.4. 22.6 12.4 52.4 94.5 17.4 17.4 13.3 79.4. 12.4 12.4 58.6 94.4 005.5 17.4 13.3 75.4 19.8 11.5 58.6 94.4 005.5 17.4 18.3 75.4 19.8 10.9 65.2 94.4 005.5 17.4 10.5 72.4 19.8 3.6 65.3 84.1 005.2 17.7 10.5 10.5 72.4 19.8 3.2 60.3 87.1 005.4 17.7 10.5 <td>3*00SG</td> <td>837.0</td> <td>25.4</td> <td>13.4</td> <td>47.3</td> <td>6.696</td> <td></td> <td>119.0</td> <td>12.4</td> <td>1.000261</td>	3*00SG	837.0	25.4	13.4	47.3	6.696		119.0	12.4	1.000261
100.0	0 00000	954.6	25.9	12.7	49.5	958.1	073.	175.0	14.1	1.000277
79.4.3 21.3 112.0 55.5 993.4. b70.7 1/2.0 12.3 1.7 1/2.0 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0 12.3 1.7 1/2.0	0.000°C	3000	22.6	12•4	52.4	4.5.7		T.+.1	13.3	1.000273
769.4 19.8 11.5 58.8 992.0 069.0 177.9 10.5	(•6eu/	5.4.67	21.3	12.0	55.5	933.t		1/3.6	12.3	1.000269
762.48 18.3 10.9 65.2 8910.7 667.2 10.9 65.2 8910.7 667.2 10.9 65.2 8910.7 66.2 7.3 66.3 87.4 66.3 7.3 66.3 87.4 66.3 7.3 66.3 87.4 66.3 7.3 7.3 66.3 87.4 66.3 7.3	7500.0		19.8	11.5	58.8	922.0	-	177.9	10.5	1.000265
752.4 10.8 10.3 65.6 899.4 605.5 10.3 7.3 72.9 14.9 7.2 60.0 877.0 60.4 1.5 6.5 72.9 14.9 7.2 60.0 877.0 60.0 1.5 6.5 713.9 13.7 5.5 56.3 86.2 6.0 1.5 6.0 70.1 13.2 56.3 86.2 6.0 1.5 6.0 6.0 65.0.5 11.5 5.2 6.1 827.2 6.0 6	000p		18.3	10.9	62.2	910.7	-	103.u	9•0	1.000201
72.09 19.8	0.0038	150.4	16•8	10.3	65.6	899.4	_	1.3.0	7.3	1・600257
713.9 13.8 7.8 56.9 87.5 but. 174.1 b.0.0 713.9 13.8 7.8 56.5 85.0 but. 172.0	3.000	740•7		छ । द्र ।	63.2	8A7.0	_	1/0.4	J. J	642000 · 1
70.25 15.05 7.5 56.5 85.0 00.0.0.2 175.5 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 175.5 15.0 0.0.2 15.	0.000.c.	7.50.9	14.0	7.2	60.0	874.5	_	1.4.1	0.:1	1.000241
680.5 12.7 3.2 56.4 B51.0 050.0 172.0 0.4 650.3 61.4 627.2 65.5 66.3 105.0 0.5 105.0 105.0 0.5 105.0	0.0000	701.3	**************************************	, s , s	56.3	862.t.		173.5	~ . o	1.0,0233
653.7 11.5 3.2 55.5 85.4 85.4 105.5 105.9 6.5 105.1 105.9 6.5 105.9 105.	11500.3	7• • 07	12.1	2.5	52.4	851.0	_	1/2.0	3 ·	1.000225
650.0 105.9 6.5 66.5 66.5 66.5 105.9 6.7 105.9 6.7 105.9 65.5 66.5 66.5 66.5 105.9 105.9 6.7 105.9 65.0 65.0 65.0 105.9 105.9 6.5 105.9 65.0 105.9 65.0 105.9 105.9 65.0 105.0	11,000.6	•	11.5	3.2	26.5 2.4.5	854.n		163.5	ر. د	1.000223
651.8	0.60511	•	10.5	3.2	61.4	827.2	_	105.4	6.7	1.0002.1
630.9 7.0 2.5 66.5 78.4 65.9 7.0 6.5 78.1 65.0 78.1 155.0 4.9 65.0 78.1 155.0 4.9 65.0 78.1 155.0 4.9 4.9 15.0 4.9 65.0 76.4 65.0 76.4 65.0 15.0 4.9 4.9 15.0 4.9 65.0 75.4 65.0 15.0 4.9 15.0 15.0 4.9 15.0	0.00021	565.9	4.0	3.5	66.3	815.7	_	100.0	S • 3	1.000218
605.2	1,000	0.100	0 0	2.5	5.89	804.1		1.cc.	٠. د	1.000.14
605.6 6.0 769.2 65.1 102.0 4.9 1 605.0 605.0 769.2 651.1 102.0 4.9 1 605.2 4.3 -1.5 65.9 754.4 640.9 102.0 4.2 1 1 605.2 5.4 -2.1 67.5 740.4 647.9 102.0 4.9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.0000	6000	D (1.2	66.3	192.b		7.5.54	`.`.	100209
58.0	15599.0	610.6) (- C	0.00	1.10/	_		ਨ : ਭਾ	#02000·1
594.0 3.4 -2.1 67.5 745.6 640.9 1.20.2 3.1 155.0 2.5 -4.1 65.2 722.9 640.9 1.20.2 3.1 155.0 2.5 -4.1 65.2 722.9 640.9 1.20.2 3.1 155.0 2.5 -4.1 65.2 7711.6 045.9 1.20.4 1.40.1 2.0 5.8 1.20.2	145,00	2000	3 1 7	r ::	0.54	7.601		0.201	V 3	567100.7
583.0 2.5 -2.0 68.9 734.4 047.9 146.1 4.4 572.1 1.7 -4.1 65.2 734.4 047.9 155.0 5.8 155.0 5.8 155.0 5.8 155.0 5.8 155.0 5.8 155.0 15.0 <	15000-0	594.0) • t	-2.1	67.5	740.0	_	1.4.5) e	1.000192
572-1 1-7 -4-1 65-2 722-9 640-9 155-0 5.8 1 561-4 -9 -5-6 61-5 711-6 045-9 102-4 0-5 1 556-9 -2 -7-1 57-8 701-5 040-4 102-4 0-5 1 540-6 -10 -7-8 65-8 680-4 040-4 170-4 7.1 1 520-3 -2.3 -7-8 65-8 680-4 040-4 170-4 7.1 1 520-3 -3.6 -9.0 71.0 670-7 640-4 170-4 7.1 1 519-4 -4.6 -9.3 69.8 660-0 650-0 170-0 11.6 <	15500.0	580.0	2•5	-2.0	68.9	734.4	_	1,46.1	3.	1.000109
561.4 .9 -5.6 61.5 711.6 045.9 102.4 0.5 1 550.9 .2 -7.0 60.7 690.4 045.4 179.4 7.1 1 530.3 -2.3 -7.8 65.8 680.4 045.4 179.4 7.1 1 520.3 -2.5 -7.8 65.8 680.4 100.2 7.1 1 520.3 -5.6 -9.0 71.0 670.4 100.2 7.1 1 510.4 -4.6 -11.3 69.8 660.0 650.1 179.6 7.1 1 510.6 -5.4 -11.3 59.7 650.0 650.0 179.6 7.5 1 491.0 -5.4 -11.3 59.7 650.0 650.0 10.0.0 9.1 1 401.6 -5.4 47.8 650.0 650.0 10.0.0 10.0 1 1 1 1 1 1 1 1 1 1 </td <td>10000</td> <td>572.1</td> <td>1.7</td> <td>-4•1</td> <td>65.2</td> <td>722.9</td> <td>_</td> <td>15.50</td> <td>υ. ε.α</td> <td>1.300184</td>	10000	572.1	1.7	-4•1	65.2	722.9	_	15.50	υ. ε.α	1.300184
556.9 -7.1 57.8 700.5 644.9 103.1 7.4 1 540.6 -1.0 -7.0 60.7 690.4 945.4 179.4 7.1 1 540.6 -1.0 -7.0 65.8 680.4 945.4 179.4 7.1 1 520.3 -3.6 -9.0 71.0 670.4 100.2 7.1 1 510.4 -4.6 -9.3 69.8 660.0 659.1 179.5 7.5 1 510.4 -4.6 -11.9 59.7 650.0 650.1 179.5 7.5 1 491.0 -5.4 -11.9 59.7 650.0 650.0 10.9 1 <td< td=""><td>0.00504</td><td>561.4</td><td>6.</td><td>· · · · ·</td><td>61.5</td><td>711.6</td><td>_</td><td>102.4</td><td>5.0</td><td>1.000179</td></td<>	0.00504	561.4	6.	· · · · ·	61.5	711.6	_	102.4	5.0	1.000179
540.6 -1.0 -7.0 60.7 60.64 04.54 17.94 7.1 530.3 -2.3 -7.8 65.8 680.4 041.9 170.9 6.9 170.9	17003.	6.054	Ą.	-7.1	57•B	700.5		103.1	7.4	1.100174
520.3 -2.3 -7.8 65.8 680.4 641.9 120.9 120.9 120.0 120	17508-0	540.6	-1.0	-7.0	60.7	h•009	_	179.4	7.1	1.000171
523-5 -5-6 -8-0 71.0 670-7 640-4 100-2 7-1 1 1 510-4 -4-6 -9-3 69-8 660-0 059-1 1/9-5 7-5 1 510-4 -4-6 -9-3 69-8 660-0 059-1 1/9-5 7-5 1 510-4 -4-6 -9-4 -11-9 59-7 650-0 053-1 1/9-6 7-5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10000	C+0CC	5.5	¥•/-	65•8	683.4	_	70 T	6.9	1.000109
519.4	105,09.3	524.5	-3.6	U•%-	71.0	670.7		100.5	7.1	1.000167
900.6 -5.4 -11.9 59.7 650.0 056.1 109.0 9.1 1 1 491.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	1,7000.1	510.4	9•4-	£ • · ·	69.8	960.0	0.59•1	179.5	7.5	1.0.10103
491.0 -5.6 -16.2 42.8 654.6 657.0 162.4 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11	0 • JU', f T	0•00¢	40	e	59.7	650.0	_	1.3.60	••1	1.000158
481.65 -6.0 -17.2 34.3 627.4 0.57.4 15.9 1 12.9 1 472.3 -7.2 -17.4 37.0 610.1 0.59.6 150.0 13.1 1 1 405.2 -8.5 -19.7 39.8 603.0 0.54.1 15.7 1 12.7 1 454.2 -9.1 -23.0 31.3 57.4 0.55.3 1.40.0 11.0 1 40.3 -9.4 -23.9 25.4 57.0 0.24.4 15.0 10.2 1 420.6 -11.4 -27.3 25.0 569.4 0.50.4 110.5 11.1	4.0000.	491.0	9•0-	-16.5	# 7 · X	63.1.6		100.4	11.6	1.100151
# \(\cdot \	J. F. F. F. F. F. F. F. F. F. F. F. F. F.	48I.4	0.9-	Z•01-	54.3	4.1.29		1500	12.9	1.300147
405-2 -8.5 -19.7 54.8 603-0 054.1 155.7 12.7 13.6 454.2 -9.1 -23.0 31.3 594.7 055.3 140.0 13.0 13.0 1454.2 -9.4 -25.9 25.4 550.7 052.4 157.4 0.8 13.0 145.6 -10.0 -27.5 25.7 575.0 051.4 150.0 10.2 13.0 140.0 -27.4 22.0 569.4 050.4 110.0 11.1	J. 1017	6.27	> 1 1	5. C. I.	31.0	61.10	0.000	0.001	13.1	1.000145
$\frac{1}{440.3}$ $\frac{-9.4}{-9.4}$ $\frac{-25.9}{-27.5}$ $\frac{25.4}{25.0}$ $\frac{530.7}{579.0}$ $\frac{1}{0.22.4}$ $\frac{1}{1.27.6}$ $\frac{1}{0.2}$ $\frac{1}{0.20.6}$	215nn.n	2.504	ဂ• ဗ •	~•0I=	χ. • • • • • • • • • • • • • • • • • • •	200	0.54•1	1.501	12.7	1.100143
450.6 -10.6 -27.5 23.7 579.0 001.4 120.6 10.2 1 420.6 -11.4 -27.5 25.0 569.4 050.4 110.0 11.1 1	1 00 00	79464	T • 6:		0.10	7 . 5 . 6 .	0.000	3 · 3 · 1	0.11	1.3.0153
950-6 -11.4 -27.4 22.4 569.4 659.4 110.5 11.1 1	0.00077	440.0	6.06.		7. · ·	7.086		10/61	ε : c :	1.000135
****** -11.4 -27.4 27.4 569.4 659.4 110.5 11.1 1	3.000.5	430.6	-101-6	· · / ? -	23.1	5/7•0		150•b	10.5	1.000153
	5.000me	7.4024	-11.4	T • 1771	7. · · ·	56.46	1,51) • 4	110.3	11.1	1.00130

STALLON ALITY	5	51+37 Ft. 1201 HRS	ET MSL. NDT		DPPLR AIN DATA 1920130155 LC-37	7,4TA در		0E 00ET 1	GEODETIC COOKUTHATES
ASCERISTOR	110. 153			-	TABLE 16 CON'T	T'NC		106.	106.31232 LOW DEG
OF OULTRIC	PRES	TEM	TEMPERATURE R DEWPOINT	REL.HUM. PERCENT	DFHSITI GHZCUBIC	SPLED OF SOUND	LING DATA	1A SPEEU	INUE X CF
NSC 1111	MILLIUNKS	OCCREES	JUNKS DEGREES CENTIGRADE			7.NO15	DEGREES (IN)	KroTs	REFRACTION.
2400043	#	-12.2	-30.3	20.4	560.0	4-6-50	111.0	12.3	1.000167
Ů*VU\$4,7	411.4	-13.5	-30.7	21.8	551.8		107.4	13.3	1.000126
J•63662	405.2	-15.0	-30.9	24.1	540.9		1(10.5	13.5	1.000124
25500 en	390.5	-16.2	-31.	24.2	535.5	054.0	105.0	13.6	1.000122
0.00002	367.3	-17.1	-53.3	22.9	520.8		10.9•0	13.3	1.000119
0.00002		-18.2	-34.6	22.1	514.3		112.0	13.0	1.000117
7.000°C		-19.3	-35.8	21.3	510.0		110.0	12.6	1.000115
5.00°12	364.3	-50-3	-37.1	20.5	501.h		119.0	12.3	1.000113
C00002		-21.4	-33.3	20.0	493.H		119.4	15.1	1.1000111
U•000€17		-22.6	-39.3	20.0	485.9		117.0	12.1	1.000109
0.00006.7		-25.€	140.3	20.0	47001		113.0	13.2	1.000108
49509.0	333.2	1-25.0	-41.4	20.0	470.5		110.1	14.7	1.000106
3.00000	320.2	2.95-	45.4	20.0	463.0		100.0	16.1	1.000104
วังเวิบจ•บั	321.5	1-27.4	43.4	20.0	455.to		102.1	17.5	1.00.0102
5100C.	314.8	-28.6	カ・カカー	20.0	†• ○††				1.000101
31,000.6	500.2	6.62-	-45.2	20.7	441.4				1.000099
\$<0000	301.7	-31.3	0.04-	21.7	434.0				1.00007

		~	ANDATORY LEVELS	. vt.l.5		
110H ALTITUDE MUSISS FEET MSE	ET MSL		1920180153	55		OL UDETIC COUNDINATES
JULY 6.1 1200 HRS JUSTO1, 110. 153	Φ.		LC-37			32.40175 LAF DEG 106.51232 LOG DEG
		TA	TABLE 17			
PRESCUKE	PRESCURE GEUPOTENTIAL	1644.5	TEMPLICATURE	NEL . HUM.	AIK) DAIA	717
MILLIPARS	FECT	AIR DEMPOINT DEGREES CENTIGRADE	LEWPOTHT ENTIGRADE		U I KL UĽĠKL	SPLED
0.024		56.9	14.3	۵. د •		6*0
U•00₩	6793.	21.9	12.2	54.	174.9	12,7
750.0		16.5	10.01	•00		7,1
0.007		12.6	3.0	54.		7.0
n.059		7.9	2.3	÷ 30		0.3
A00.0		3.0	-1.0	67.		3.2
0.003		•	-7.3	58.		7.5
0.003		-5.4	-12.1	.63		V. V.
0.004		1.6-	-24.1	21.		0.3
U.001		-15.6	-31.1	25.		3.5
0.035		-22.5	-39.5	20.		2.1
0 001		-41	2			

